Work Order 1 Wednesday, June 04			*120	1420*					Page 1
	407-5		Accept	*N900	040100)* s	Setup Start	*N!	S1*
Revision ID: Item Name: Rin	g	30					Stop	*N.	S2*
Start Date: 6/04 Required Date: 6/04 Reference:	4/14 Start Qty: (20.0 4/14 Req'd Qty: 20.0	*20* *20* *20*		Cust Item I. Customer:	D:		_		
Approvals: Pr	rocess Plan: _ Mしづ	Date: 14-010-1	つしTooling:	Da	nte:	R	Run Start	- ^IVI	R1*
Qe		Date:		;	nte:		Stop	*NI	R2*
Sequence ID/ Work Center ID	Operation Description	19	Set Up/ Run Hours	Tool ID	Tool # Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr			-					
D3407	Rev E							•	
100	FLOW WATER JET	•	0.00			30	٥		23 9-89 14-06-26
Waterjet FLOW CNC Waterjet	Dwg Re	s per Dwg D3407 v:v:	0.00	Jeburr-> PL	M 14-0	P-91			
:	2-Break	edges on manual lathe Dwg	D3407 (175rpm)						
110 *11 0 *	QC2- Inspect parts o	ff machine FAI/FAIB	0.00			_30	δ		DAS 23 989 140676
QC	Memo		0.00				<u> </u>		

Memo

Quality Control

DQA:			Date:			WORK ORDER NON	~	NEO	DAAANCE / LIDDATE				7	DART
QA Closed:			Date:			WORK ORDER NON-	-CC	JNFOI	RIVIANCE / UPDATE	W	ork Order up	odate only		AEROSPACE
Manli Ond						DISPOSITION			AGAINST	DE	PARTMENT	/PROCESS		
Work Orde	er: -	· · · · · · · · · · · · · · · · · · ·				Davisarli	ı		Skid-tube Crosstube	Г	7	Water Jet		ingineering
Part N	do					Rework Scrap			Machining Small Fab	-	Pro	d. Eng. Coor.	┥ '	Quality
raiti	٠٠				—	Use-as-is			noforming Finishing	-	-1	re/Packaging		Other
NCR N	۱o. ₋					Suspected Unapproved		THEIR	Large Fab Composite	_		Supplier		
Root					Desci	ription of work order update		nitial	Action		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification		QC Inspector
Design														
Doc/Data							ŀ							
Equip/Tooling														
Handling/Pre														!
Material														
Operator 🖫									·					
Offset/Setup												·		:
Process														
Supplier														
Training	Ш		1											
Transport			ł.	rs,										
Unapproved														
5*							FAI	ULT CA	TEGORY					
Landi	ng G	Bear				General		•			_	_	_	
•	Ш	Bending			<u> </u>	Bend		Folio/F	Program	<u>. </u>	Outside Dim	ensions	_	essure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance		t-up
1		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorre	cí _	Te	mperature/Cure
	Ш	Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Unqualified	L	Part Lost/Mi	· -	\w•	
	Ш	Cuffs				Contamination		Instruct	tions Incomplete/Unclear	L	Part Moved		Wr	ong Stock Pulled
	\bigsqcup	Crushing				Countersink		Misalig	gned/off center		Positioned V	Vrong		
		Heat Trea	it			Cut Too Short		Mislabe	eled		Power Loss/	Surge	Ot	her
		Inspection	n Strip in	Tube		Drawing		Misread	d					
		Marks/Ch	atter			Drill Holes		Off-set	. **					
		Turning S	equence			Finish		Out of	Calibration					
		Wave/Tw	ist in Tub	oe .		Fit/Function		Out of	Sequence					

W	/ork	Orde	r ID	120	420
71	UIR	OI UC	1 11/	140	74V

_ .

Work Ord Wednesday, Jun					*120	1420*							Page 2
Item ID: Revision ID: Item Name:	D3407-5		•	A	ccept	*N900	04 0	100	ገ*	Setup	Start Stop	*N:	S1* S2*
Start Date: Required Date: Reference:	6/04/14	Start Qty: 20.00 Req'd Qty: 20.00	.'`	*20* *20*		Cust Item I Customer:	D:					ı u.	17
Approvals:	Process Pl	an:	Date:_ Date:_	•	Tooling: SPC (Y/N):	-	ate:			Run	Start Stop	*N	R1* R2*
Sequence ID/ Work Center II 120 *1 20* QC Quality Control 130 *1 20* Packaging Packaging	D	Operation Description QC8- Inspect parts - secon Memo Identify as per dwg & Sto Memo *****STOCE	ck Locatio	n:_ iV}}-0 0/ GE FAB****	Set Up/ Run Hours 0.00 27 0.00 0.00	Tool ID	Tool #	Plan Code	Accept Qty 30	Qty	, :	Reject Number	Insp. Stamp
140 *1 4 0 * QC Quality Control		QC21- Final Inspection - Memo	Work Orde	er Release	0.00			,		/	4/-	7/3 1	Mr. Mr.

DQA:			Date:												TRAC
			D-4			WORK ORDER NON-	-CC	ONFO	RMANCE / UF		المصال	0	مامهم مسان		AEROSPACE
QA Closed:			Date:		1		_				work	Order u	odate only		
Work Orde	er:					DISPOSITION				AGAINST [DEPA	RTMENT	/PROCESS		
	_				_	Rework	١.		Skid-tube	Crosstube			Water Je	:	Engineering
Part N	io.					Scrap			Machining	Small Fab	7	Pro	d. Eng. Coor	\vdash	Quality
	-					Use-as-is			noforming	Finishing	\exists		re/Packaging		Other
NCR N	10		······			Suspected Unapproved			Large Fab	Composite		•	Supplier	1	
Root	$\overline{}$				Desci	ription of work order update		nitial	Acti	ion		Sign &			
Cause		Date	Step	Qty	0000	or non-conformance		ief Eng			1	Date	Verification	n	QC Inspector
Design	1	10000		~.,							十				- Compression
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Equip/Tooling															
Handling/Pre	\neg														;
Material	\neg			! !							ł				
Operator	\neg									•					
Offset/Setup	\neg														
Process		i													
Supplier									·				,		
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Transport				ļ											
Unapproved							<u> </u>								
							FA	ULT CA	regory						
Landi	ng G	ear				General				_				_	
	[Bending				Bend		•	Program	L	_	ıtside Dim		\vdash	Pressure/Forced
		Centre No	ot Concer	ntric	L	BOM/Route		Grain		-		-	tolerance	\vdash	Set-up
	_	Cracks				Broken/Damage/Defect		Hardwa		-		rt Incorre		<u>_</u>	Temperature/Cure
	_	Crimp/Kin	ık/Ripple	/Wave	<u> </u>	Burrs		4 '	ion Incomplete/Un	· -		rt Lost/M	_	<u> </u>	Weld
		Cuffs			<u> </u>	Contamination		4	tions Incomplete/U	Inclear	_	rt Moved			Wrong Stock Pulled
	_	Crushing		-	<u> </u>	Countersink		1 `	gned/off center	-		sitioned V	=		l
ļ	$\overline{}$	leat Trea			<u> </u>	Cut Too Short		Mislabe		L	Pc	wer Loss/	Surge		Other
	$\overline{}$	nspection	•	Tube	<u> </u>	Drawing	<u> </u>	Misrea			_		-		
		Marks/Ch			<u> </u>	Drill Holes	_	Off-set			_				
	\vdash	Turning So			<u> </u>	Finish	_	-	Calibration		_		-		
		Wave/Tw	ist in Tub	oe		Fit/Function	<u></u>	Out of S	Sequence						

Picklist Print

Wednesday, June 04, 2014 3:04:37 PM

Work Order ID: 120420

120420

Parent Item:

D3407-5

D3407-5

Parent Item Name: Ring

Start Date: 6/04/14

Required Date: 6/04/14

Page 1

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP Rev:A New Issue 05-11-22 JLM

IPP Rev:B Now on Waterjet 08-05-14 JLM Verified By:DD

IPP Rev:C 08-08-12 revE as per dwg (ecn 08-507) DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date ISA@ d 23	Status
M174B0.250X4.000		Purchased	No			100	f	23.9700	0.2666	5.612632		9-89	
*M174R0 17-4 SS Bar .250 X 4.00	250X4 ())))							**		m	2 14	106/20
:				Location		Loc	<u>Oty</u>	Loc Code					
ı				MAT049		2	23.97						

23.97

m127866 M177583

30

DQA:		Date:											TRAC
0.4.01		Data			WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE	147	ork Ordor un	ndata anlu		AEROSPACE
QA Closed:		Date:							VV	ork Order up	date only		
Work Order	r·			,	DISPOSITION			AGAINS	T DE	PARTMENT	/PROCESS		
				_	Rework			Skid-tube Crosstub	e	1	Water Jet		Engineering
Part No	0.				Scrap			Machining Small Fa	_	Pro	d. Eng. Coor.	_	Quality
					Use-as-is			noforming Finishin	g	1	re/Packaging		Other
NCR No	0.				Suspected Unapproved			Large Fab Composit	e		Supplier		
								<u> </u>			·		
Root	173			Desc	ription of work order update	ı	nitial	Action		Sign &			
Cause	Dāt	e Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verificatio	n	QC Inspector
Design					•								
Doc/Data *	_												
Equip/Tooling	_									ļ ;			
Handling/Pre	_												
Material	_												
Operator	_		,										
Offset/Setup	4												
Process	-												
Supplier	-					1							
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Transport Unapproved	-												
Onapproved	<u> </u>			<u>!</u>		FAI	ULT CA	TEGORY		<u>L.,,</u>	l		··
Landin	g Gear				General				_				
	Bendi	ng			Bend		Folio/F	Program		Outside Dim	ensions		Pressure/Forced
	_	Not Conce	ntric		BOM/Route		Grain	•		Over/Under	tolerance		Set-up
	Crack	;			Broken/Damage/Defect		Hardwa	are		Part Incorre	ci		Temperature/Cure
	Crimp	/Kink/Ripple	e/Wave		Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/Mi	issing		Weld
	Cuffs				Contamination		Instruc	tions Incomplete/Unclear		Part Moved		L	Wrong Stock Pulled
	Crush	ng			Countersink		Misali	gned/off center		Positioned V	-		•
	Heat '	reat			Cut Too Short		Mislabe	eled	L	Power Loss/	Surge		Other
] [inspe	tion Strip in	Tube		Drawing		Misrea	d					
	Mark	/Chatter			Drill Holes	_	Off-set						
	_	ng Sequence			Finish		4	Calibration					<u> </u>
]	Wave	/Twist in Tul	be		Fit/Function		Out of	Sequence					

DART AEROSPACE LTD	Work Order:	120420
Description: Tow Ring	Part Number:	D3407-5
Inspection Dwg: D3407 Rev: E		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X	First Article	Prototype
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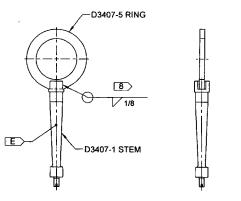
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.250	+/-0.010	0.260	_		ν	Jemos.
Ø3.000	+/-0.030	3004"	_		U	
Ø2.050	+0.012/-0.001	2-053	-		U	
0.75	+/-0.030	0.75	_		J	
					•	
	DAS					

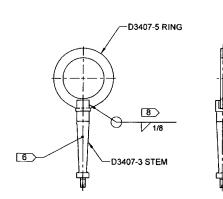
Measured by: 9-89 Audited by: 1-89 Prototype Approval: N/A

Date: 14-010-26 Date: 14-010 Date: N/A

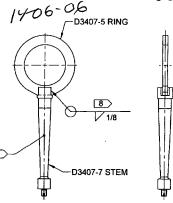
Rev	Date	Change	Revised by	Approved
Α	07.02.02	New Issue	KJ/JLM	
В	07.09.18	Tolerance revised	KJ/EC	
С	08.05.14	Dimensions updated per Dwg Rev D	KJ/JLM ,	11
D	09.05.04	Dwg Rev updated	KJ/DD 😾	5/2/
L	····			-yer

QTY -045 QTY -041 PART NUMBER DESCRIPTION D3407-041 **TOW RING** X D3407-043 TOW RING D3407-045 **TOW RING** D3407-1 STEM STEM D3407-3 D3407-5 RING STEM D3407-7





SHOP COPY RETURN TO **ENGINEERING UNCONTROLLED COPY** SUBJECT TO AMENDMENT WITHOUT NOTICE WORK ORDER NO. 120 420 M CS 1406-06 -D3407-5 RING



D3407-041 TOW RING

D3407-043 TOW RING

D3407-045 TOW RING

Ε	ADD D3 REVISE REASO	407-045 (ZN B2 D NOTE 6 TO A N: PRODUCTIO	РН	08.07.23	
D	D3407-1 WITH D FLAT OI B6-4); R	1/-3 SLOT WAS 3407-5 (ZN C2-2 N ONE END FO EASON: PROD	РН	08.04.07	
С	-1/-3 LO	NGER FOR FIT	W/WASHER	CP	05.09.09
В	UPDATE	CP	05.06.17		
Α	NEW IS	SUE	CP	05.03.16	
REV.			DESCRIPTION	BY	DATE
DESIG DRAW		Pel	DART AEROSPACE PORT HADLOCK		, INC.
CHECK	ŒD	13-1	DRAWING NO.		REV. E
MFG. APPR.			D3407		SHEET 1 OF
APPRO	PPROVED TITLE				SCALE
DE API	PR.	-#	TOW RING		NTS
DATE	08.0	17 22	COPYRIGHT © 2005 BY DART ARE	ROSPACE	ISA, INC.

8

NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED

4) UNITS: INCHES ONLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: NIA

6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER

7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs

8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

